

CLAIMS:

1. A shelving rack comprising:

a frame structure including two generally vertical rear legs and two generally vertical front legs with the front legs arranged at a front of the rack and spaced by a width of the rack and the rear legs arranged at the rear of the rack and spaced by the width of the rack, the front legs being spaced from the rear legs by a depth of the rack;

a plurality of shelves arranged one above the next with a width substantially equal to the width of the rack and a depth between a front edge and a rear edge substantially equal to but greater than the depth of the rack;

each shelf being supported at the front edge so the weight from the front edge is carried by the front legs;

each shelf being inclined upwardly and rearwardly from the front edge toward the rear edge which is elevated;

each shelf having an element thereof at the rear edge in engagement with a front face of a respective one of the rear legs;

each front leg being connected to the respective rear leg such that the space therebetween is maintained fixed in response to pressure from the shelves tending to increase the space;

each shelf being substantially rigid between the front edge and the rear edge such that the shelf remains straight between the element and the front edge and supports the weight of the articles therebetween without bending;

each shelf being substantially rigid across the rear edge such that the shelf remains straight between the elements supports the weight of the articles therebetween without bending;

such that each shelf is supported in inclined position solely by its support at the front edge and its engagement with the rear legs holding the rear edge in elevated position against downward movement.

2. The shelving rack according to Claim 1 wherein the angle of inclination is sufficient that the articles on the shelf slide forwardly to the front edge.

3. The shelving rack according to Claim 1 wherein the shelves are formed of wire

4. The shelving rack according to Claim 1 wherein there is provided a rear stiffener member extending across the shelf adjacent the rear edge.

5. The shelving rack according to claim 4 wherein the rear stiffener member includes a flat surface arranged at an angle on the shelf to lie in a common plane with the front face of the rear leg.

6. The shelving rack according to Claim 4 wherein the rear stiffener member is a flat bar.

7. The shelving rack according to Claim 4 wherein the rear stiffener member is V-shape.

8. The shelving rack according to Claim 4 wherein the elements of the shelf engaging the rear legs are formed as parts of the stiffener member.

9. The shelving rack according to Claim 1 wherein the front and rear legs are held together at the required spacing by braces interconnecting the legs.

10. The shelving rack according to Claim 1 wherein the front edge is supported solely on the front legs and is substantially rigid between the front legs such that the shelf remains straight along the front edge and supports the weight of the articles therebetween without bending.

11. The shelving rack according to Claim 1 wherein the front edge is supported on a rigid frame member connected across the front legs.

12. The shelving rack according to Claim 1 wherein the shelf includes an upturned stop member to prevent the articles from sliding off the inclined shelf over the front edge.

13. The shelving rack according to Claim 1 wherein the shelf has a sheet member thereon defining a low friction surface to allow the articles to slide.

14. The shelving rack according to Claim 1 wherein the sheet member has an upturned front edge to prevent the articles from sliding off the inclined shelf over the front edge.

15. The shelving rack according to Claim 1 wherein the shelf is formed by primarily from wires extending from front to rear with a rear stiffener member, a front wire and at least one additional transverse wire.

16. The shelving rack according to Claim 1 wherein the shelf is formed from wire mesh supported by front to rear support members extending from

a transverse support rail at the front edge to a stiffener member of the shelf at the rear edge.

17. The shelving rack according to Claim 1 wherein the front edge of the shelf includes a wire which is connected at its ends to respective one of the front legs so as to hold the front legs together.

18. A shelving rack comprising:

a frame structure including two generally vertical rear legs and two generally vertical front legs with the front legs arranged at a front of the rack and spaced by a width of the rack and the rear legs arranged at the rear of the rack and spaced by the width of the rack, the front legs being spaced from the rear legs by a depth of the rack;

a plurality of shelves arranged one above the next with a width substantially equal to the width of the rack and a depth between a front edge and a rear edge substantially equal to but greater than the depth of the rack;

each shelf being supported at the front edge so the weight from the front edge is carried by the front legs;

each shelf being inclined upwardly and rearwardly from the front edge toward the rear edge which is elevated;

wherein each shelf has a plastics sheet member thereon defining a low friction surface to allow the articles to slide.

19. The shelving rack according to Claim 18 wherein the sheet member has an upturned front edge to prevent the articles from sliding off the inclined shelf over the front edge.

20. A shelving rack comprising:

a frame structure including two generally vertical rear legs and two generally vertical front legs with the front legs arranged at a front of the rack and spaced by a width of the rack and the rear legs arranged at the rear of the rack and spaced by the width of the rack, the front legs being spaced from the rear legs by a depth of the rack;

a plurality of shelves arranged one above the next with a width substantially equal to the width of the rack and a depth between a front edge and a rear edge substantially equal to but greater than the depth of the rack;

each shelf being supported at the front edge by a front transverse shelf support beam connected across the front legs so the weight from the front edge is carried by the front legs;

each shelf having a shelf plane being inclined upwardly and rearwardly from the front edge toward the rear edge which is elevated;

each shelf being supported at the rear edge by a rear transverse shelf support beam connected across the rear legs so the weight from the rear edge is carried by the rear legs;

each of the front support beam and the rear support beam including a support receptacle for the respective edge of the shelf;

the shelf having at the rear edge a downwardly turned rear edge portion extending downwardly from the shelf plane to the rear receptacle.

21. The shelving rack according to Claim 20 wherein the shelf includes a plurality of longitudinally spaced stiffener members each extending from the front edge to the downwardly turned rear edge portion.

22. The shelving rack according to Claim 20 wherein each stiffened member is of reduced height at the front to engage into the receptacle of the front support beam.

23. The shelving rack according to Claim 20 wherein each shelf is formed from wire mesh.

24. The shelving rack according to Claim 20 wherein each shelf has a plastics sheet member thereon defining a low friction surface to allow the articles to slide.

25. The shelving rack according to Claim 24 wherein the sheet member has an upturned front edge to prevent the articles from sliding off the inclined shelf over the front edge.

26. The shelving rack according to Claim 20 wherein the rear support beam is located at a height above the front support beam.